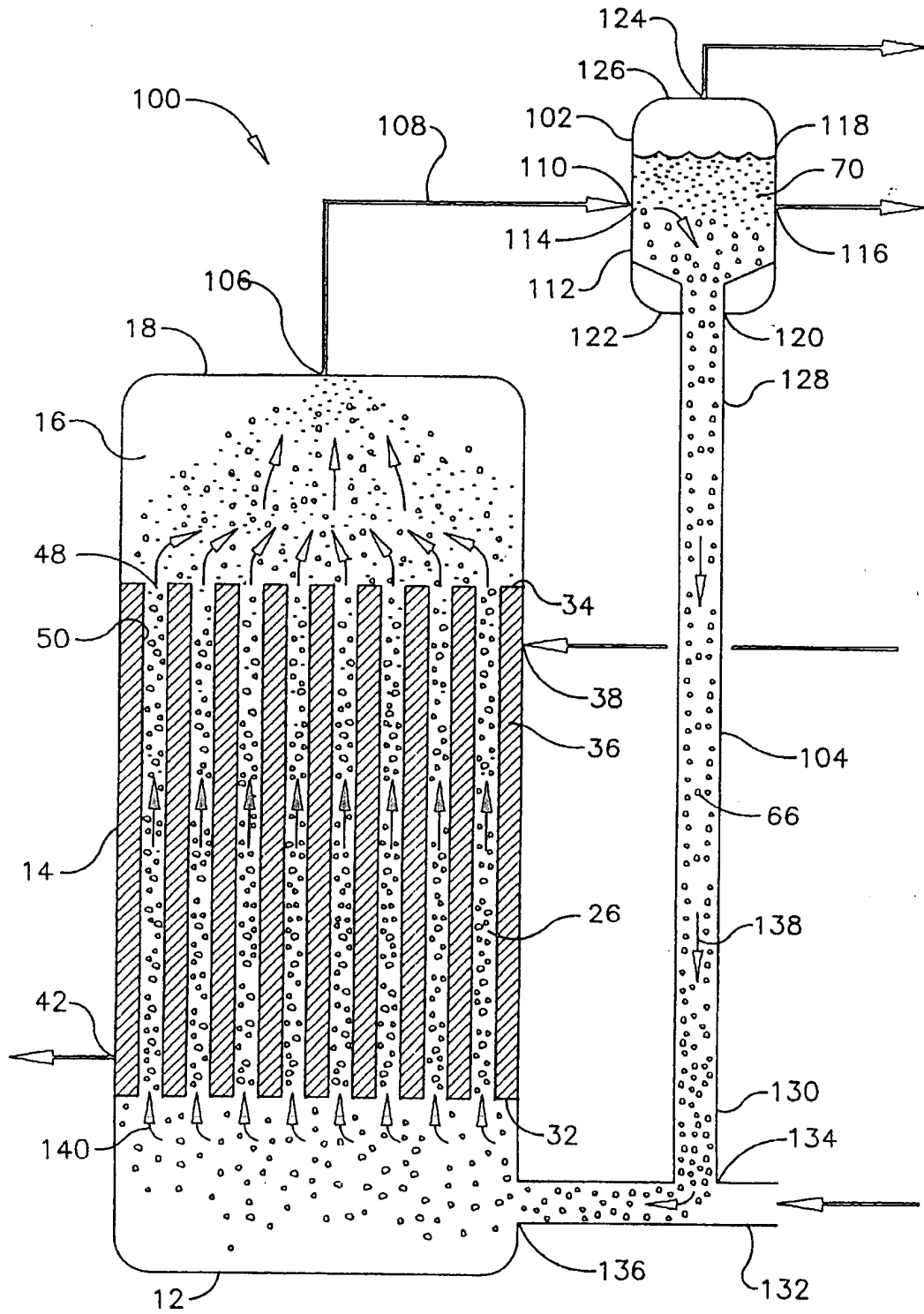


Fig. 1

Fig. 2



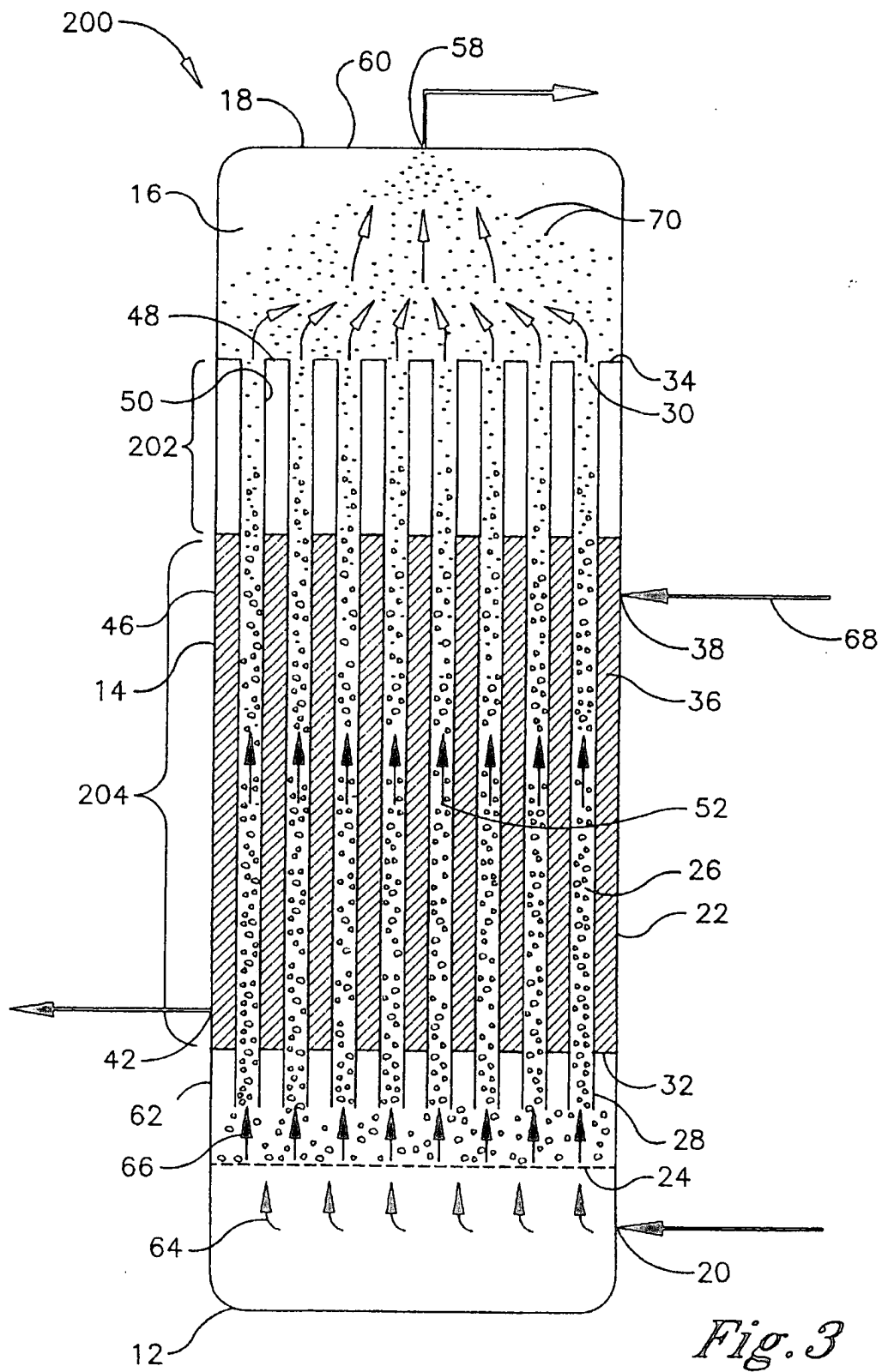


Fig. 3

GLOSSARY OF DRAWING TERMS
Attorney Docket No. 990018 P02

10 fluidized bed heat exchanger (FBHX)
12 lower chamber
14 middle chamber
16 upper chamber
18 shell
20 petroleum liquid feed inlet
22 vertical side of shell
24 distributor plate
26 tubes
28 lower ends of tubes
30 upper ends of tubes
32 lower tube plate
34 upper tube plate
36 interstitial space
38 heat transfer medium inlet
40 upper portion of middle chamber
42 heat transfer medium outlet
44 lower portion of middle chamber
46 opposite vertical side of shell
48 tube interiors
50 tube walls
52 downcomer
54 lower end of downcomer
56 upper end of downcomer
58 product outlet
60 top of shell
62 upper portion of lower chamber
64 petroleum liquid feed stream arrows
66 solid particle medium
68 heat transfer medium arrow
70 solid hydrate particles
72 solid particle medium return arrows

100 alternate FBHX
102 external separator
104 external downcomer
106 fluidizable mixture outlet
108 fluidizable mixture line
110 separator fluidizable mixture inlet
112 vertical side of separator
114 middle portion of separator
116 product outlet

118 opposite vertical side of separator
120 solid particle medium outlet
122 bottom
124 gas vent
126 top
128 upper end of downcomer
130 lower end of downcomer
132 petroleum liquid feed line
134 tee junction
136 fluidizable mixture inlet
138 solid particle medium return arrows
140 fluidizable mixture arrows

200 alternate FBHX
202 upper portion of tubes
204 lower portion of tubes